4.2.B. 0601010402.

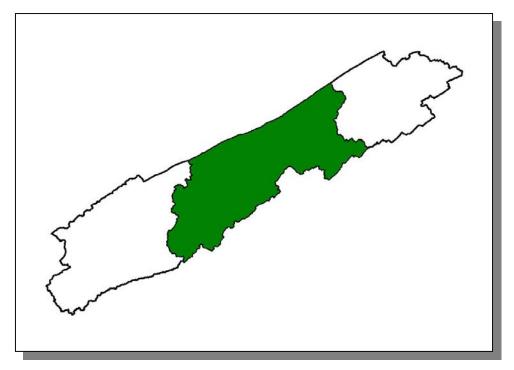


Figure 4-42. Location of Subwatershed 0601010402. All Holston River HUC-10 subwatershed boundaries are shown for reference.

4.2.B.i. 060101040201 (Cherokee Lake).

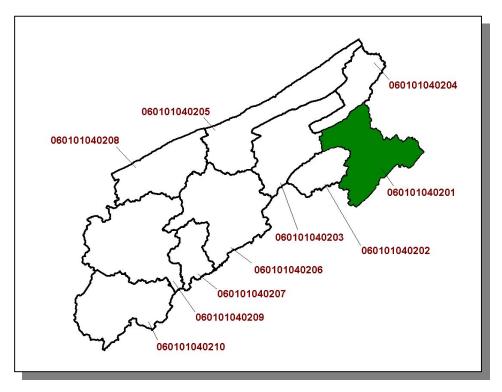


Figure 4-43. Location of Subwatershed 060101040201. All HUC-12 subwatershed boundaries are shown for reference.

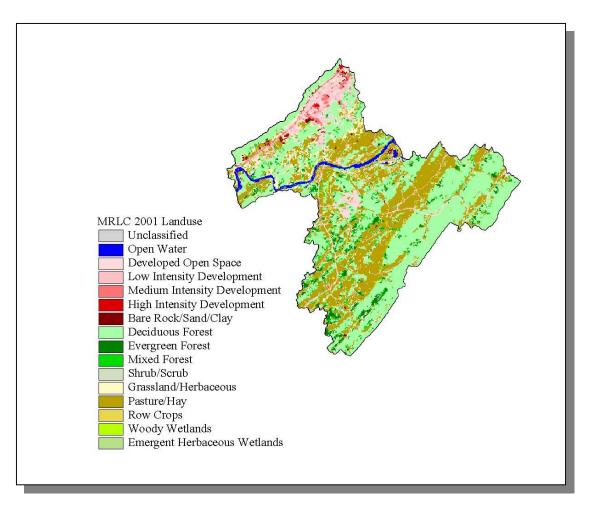


Figure 4-44. Illustration of Land Use Distribution in Subwatershed 060101040201.

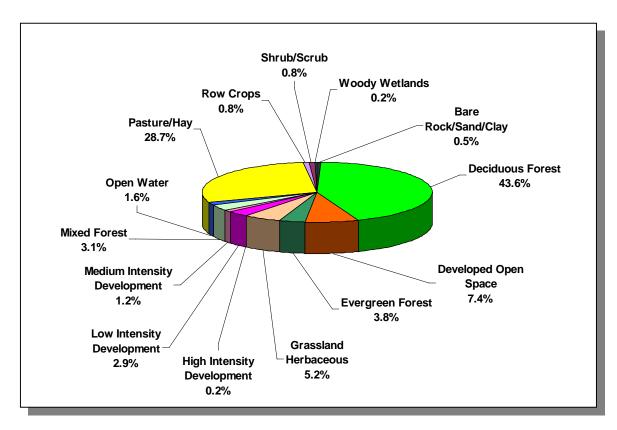


Figure 4-45. Land Use Distribution in Subwatershed 060101040201. More information is provided in Appendix IV.

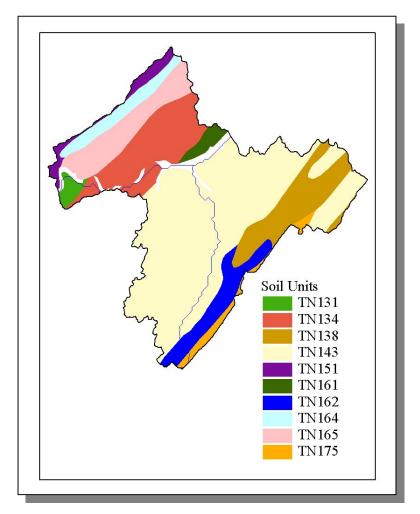


Figure 4-46. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040201.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN131	0.00	С	1.17	4.95	Silty Loam	0.33
TN134	0.00	В	1.38	5.18	Loam	0.31
TN138	0.00	С	2.48	4.26	Sandy Loam	0.22
TN143	0.00	С	1.22	6.44	Loam	0.32
TN151	0.00	С	2.88	4.75	Loam	0.40
TN161	7.00	С	1.41	5.11	Loam	0.31
TN162	1.00	С	1.52	6.20	Loam	0.36
TN164	0.00	С	1.48	5.15	Loam	0.25
TN165	0.00	В	1.79	5.51	Silty Loam	0.32
TN175	0.00	В	1.49	5.23	Loam	0.30

Table 4-37. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040201. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION				ESTIMATED POPULATION IN WATERSHED			
Country	1000	4007	2000	Portion of	1000	1007	2000	% Change
County	1990	1997	2000	Watershed (%)	1990	1997	2000	(1990-2000)
Greene	55,853	59,369	62,909	0.34	190	202	214	12.6
Hawkins	44,565	48,821	53,563	8.71	3,880	4,250	4,663	20.2
Total	100,418	108,190	116,472		4070	4,452	4,877	19.8

Table 4-38. Population Estimates in Subwatershed 060101040201.

		_	NUMBER OF HOUSING UNITS				
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other	
Rogersville	Hawkins	4,149	1,995	1,833	133	29	

Table 4-39. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060101040201.

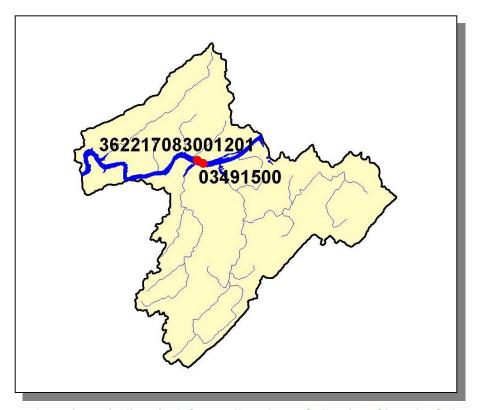


Figure 4-47. Location of Historical Streamflow Data Collection Sites in Subwatershed 060101040201. More information is provided in Appendix IV.

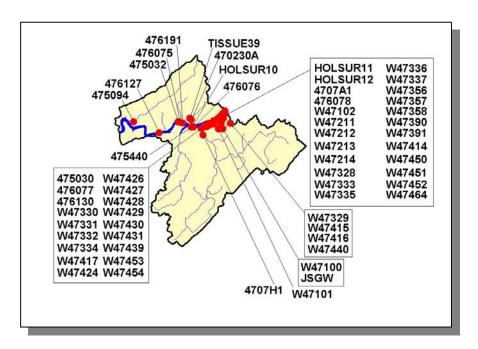


Figure 4-48. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060101040201. More information, including site names and locations, is provided in Appendix IV.

4.2.B.i.a. Point Source Contributions.

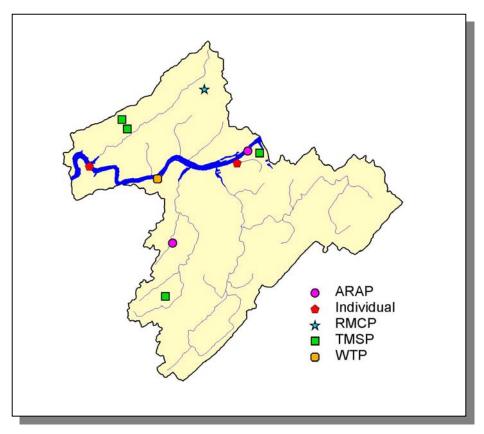


Figure 4-49. Location of Permits Issued in Subwatershed 060101040201. More information, including the names of facilities, is provided in Appendix IV.

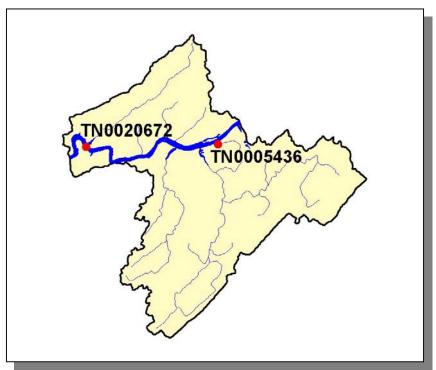


Figure 4-50. Location of Active NPDES Sites in Subwatershed 060101040201. More information, including the names of facilities, is provided in Appendix IV.

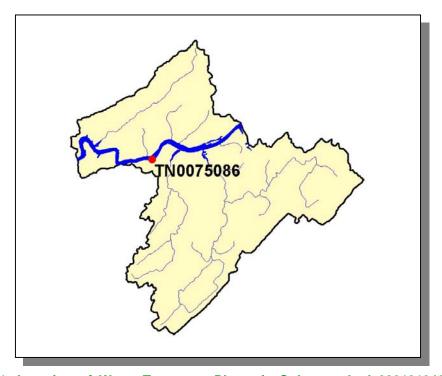


Figure 4-51. Location of Water Treatment Plants in Subwatershed 060101040201. More information, including the names of facilities, is provided in Appendix IV.

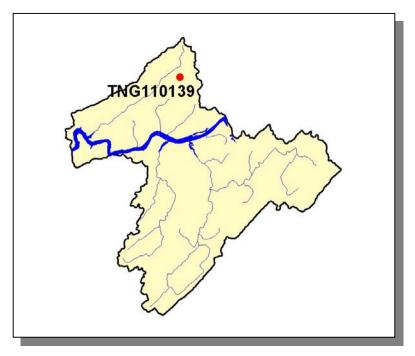


Figure 4-52. Location of Ready Mix Concrete Plants (RMCP) in Subwatershed 060101040201. More information is provided in Appendix IV.

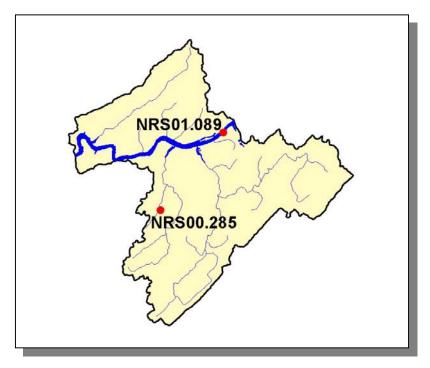


Figure 4-53. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 060101040201. More information is provided in Appendix IV.

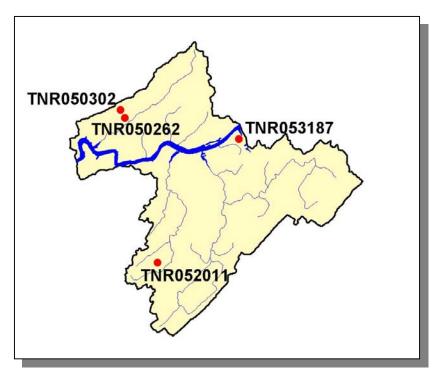


Figure 4-54. Location of TMSP Sites in Subwatershed 060101040201. More information, including the names of facilities, is provided in Appendix IV.

4.2.B.i.a.i. Dischargers to Water Bodies Listed on the 2004 303(d) List

There is one NPDES facility discharging to water bodies listed on the 2004 303(d) list in Subwatershed 060101040201:

• TN0020672 (Rogersville STP) discharges to the Holston River @ RM 99.7

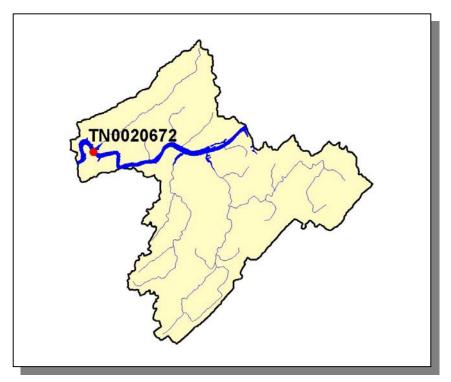


Figure 4-55. Location of NPDES Dischargers to Water Bodies Listed on the 2004 303(d) List in Subwatershed 060101040201. More information, including the names of facilities, is provided in Appendix IV.

PERMIT#	1Q10	3Q10	7Q10	3Q20	QDESIGN
TN0020672	363				

Table 4-40. Receiving Stream Flow Information for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 060101040201. Data are in million gallons per day (MGD). Data were obtained from the USGS publication Flow Duration and Low Flows of Tennessee Streams Through 1992 or from permit files.

PERMIT#	FLOW	DISCHARGE RATIO
TN0020672	Χ	X

Table 4-41. Monitoring Requirements for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 060101040201.

PERMIT#	WET	CBOD ₅	FECAL COLIFORM	TRC	TSS	SETTLEABLE SOLIDS	DO	рН
TN0020672	Х	Χ	X	Х	Х	Χ	Χ	Χ

Table 4-42. Parameters Monitored for Daily Maximum Limits for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 060101040201. WET, Whole Effluent Toxicity; CBOD₅, Carbonaceous Biochemical Oxygen Demand (5-Day); TRC, Total Residual Chlorine; TSS, Total Suspended Solids.

4.2.B.i.b. Nonpoint Source Contributions.

	LIVESTOCK (COUNTS)								
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Chickens (Broilers Sold)	Hogs	Sheep			
and the second s									
2,081	4,034	101	7	1,095	49	27			

Table 4-43. Summary of Livestock Count Estimates in Subwatershed 060101040201. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	LIVESTOCK COUNTS								
County Beef Cow Cattle Milk Cow Chickens (Layers) Chickens (Broilers Sold) Hog							Sheep		
Greene	33,962	72,582	7,282	1,190	4,908,815	495	226		
Hawkins	18,796	36,429	903	1,079	0	442	243		

Table 4-44. Summary of Livestock Count Estimates in Greene and Hawkins Counties. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	NTORY	REMOVAL RATE		
	Forest Land	Timber Land	Growing Stock	Sawtimber	
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Greene	180	171.8	2.0	10.5	
Hawkins	177.4	177.4	0.4	2.1	

Table 4-45. Forest Acreage and Annual Removal Rates (1987-1994) in Greene and Hawkins Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.27
Grass (Hayland)	0.54
Legumes, Grass (Hayland)	0.40
Legumes (Hayland)	0.16
Grass, Forbs, Legumes (Mixed Pasture)	0.53
Corn (Row Crops)	16.75
Tobacco (Row Crops)	16.35
Other Vegetable and Truck Crops	32.10
Farmsteads and Ranch Headquarters	0.46

Table 4-46. Annual Estimated Total Soil Loss in Subwatershed 060101040201.

4.2.B.ii. 060101040202 (Robertson Creek).

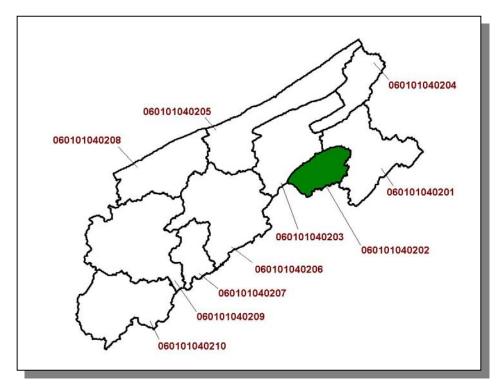


Figure 4-56. Location of Subwatershed 060101040202. All HUC-12 subwatershed boundaries are shown for reference.

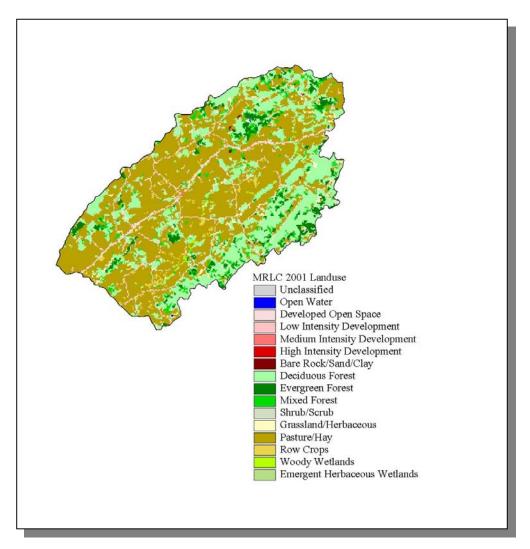


Figure 4-57. Illustration of Land Use Distribution in Subwatershed 060101040202.

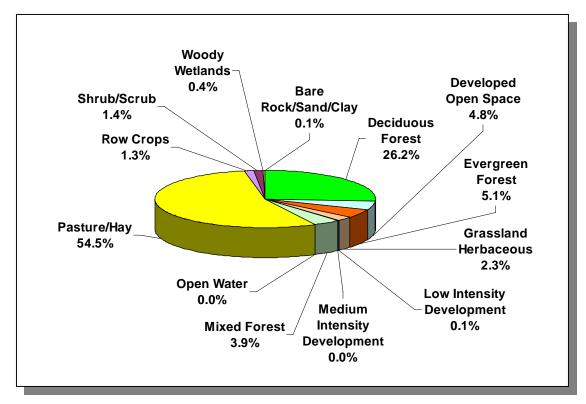


Figure 4-58. Land Use Distribution in Subwatershed 060101040202. More information is provided in Appendix IV.

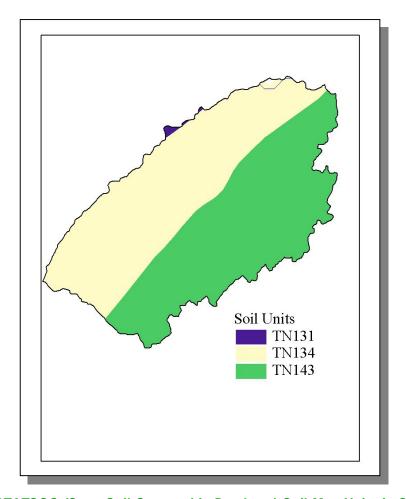


Figure 4-59. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040202.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN131	0.00	С	1.17	4.95	Silty Loam	0.33
TN134	0.00	В	1.38	5.18	Loam	0.31
TN143	0.00	С	1.22	6.44	Loam	0.32

Table 4-47. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040202. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION					IATED PO N WATER	PULATION SHED	
County	1990	1997	2000	Portion of Watershed (%)				% Change (1990-2000)
Hawkins	44,565	48,821	53,563	3.72	1,656	1,814	1,991	20.2

Table 4-48. Population Estimates in Subwatershed 060101040202.

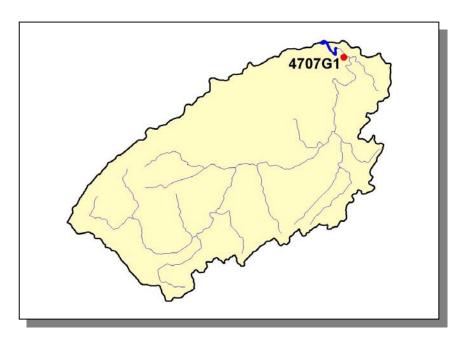


Figure 4-60. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060101040202. More information, including site names and locations, is provided in Appendix IV.

4.2.B.ii.a. Point Source Contributions.

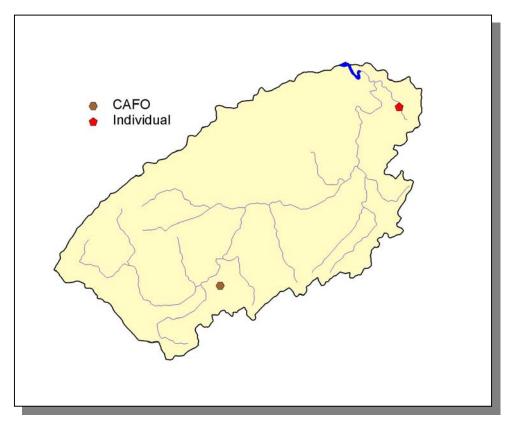


Figure 4-61. Location of Permits Issued in Subwatershed 060101040202. More information, including the names of facilities, is provided in Appendix IV.

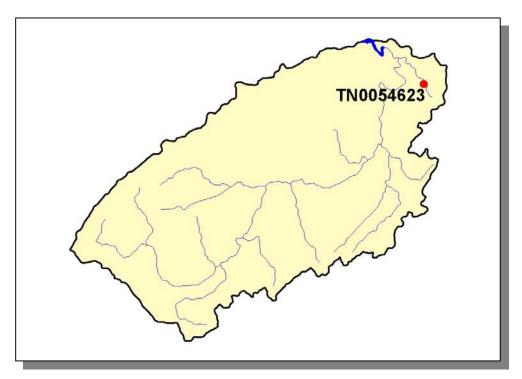


Figure 4-62. Location of Active NPDES Sites in Subwatershed 060101040202. More information, including the names of facilities, is provided in Appendix IV.

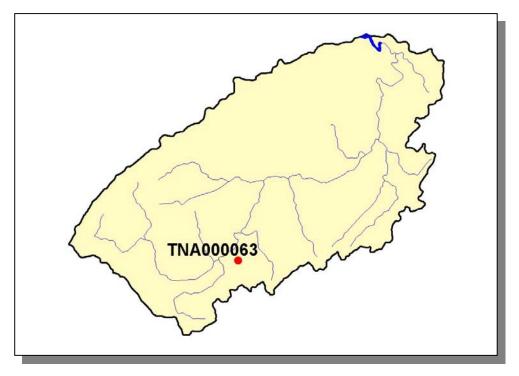


Figure 4-63. Location of Concentrated Animal Feeding Operations (CAFO) in Subwatershed 060101040202. More information, including the names of facilities, is provided in Appendix IV.

4.2.B.ii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS									
Beef Cow	Hogs	Sheep							
1,553	3,011	75	5	37	20				

Table 4-49. Summary of Livestock Count Estimates in Subwatershed 060101040202. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS										
Count	У	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep			
Hawkins		18,796	36,429	903	1,079	442	243			

Table 4-50. Summary of Livestock Count Estimates in Greene, Hawkins, Sullivan, and Washington Counties. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	INVEN	NTORY	REMOVAL RATE		
County	Forest Land Timber Land (thousand acres)		Growing Stock Sawtimber (million cubic feet) (million board feet)		
Hawkins	177.4	177.4	0.4	2.1	

Table 4-51. Forest Acreage and Annual Removal Rates (1987-1994) in Hawkins County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.26
Grass (Hayland)	0.56
Legumes, Grass (Hayland)	0.40
Legumes (Hayland)	0.16
Grass, Forbs, Legumes (Mixed Pasture)	0.54
Tobacco (Row Crops)	16.40
Other Vegetable and Truck Crops	33.50
Farmsteads and Ranch Headquarters	0.40

Table 4-52. Annual Estimated Total Soil Loss in Subwatershed 060101040202.

4.2.B.iii. 060101040203 (Cherokee Lake).

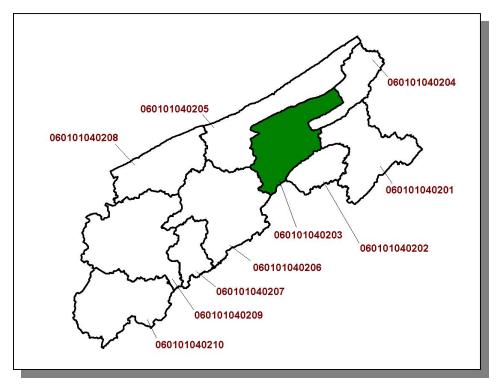


Figure 4-64. Location of Subwatershed 060101040203. All HUC-12 subwatershed boundaries are shown for reference.

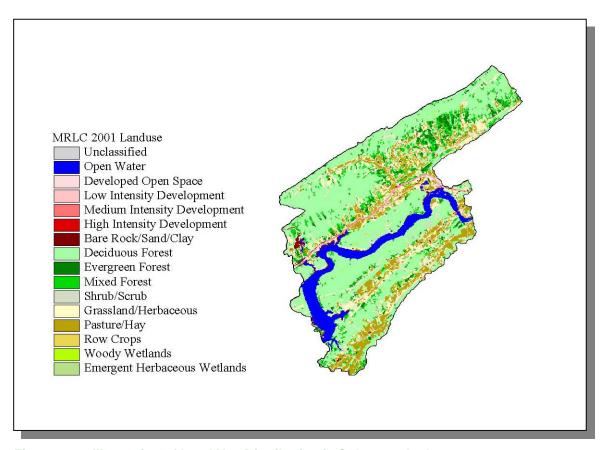


Figure 4-65. Illustration of Land Use Distribution in Subwatershed 060101040203.

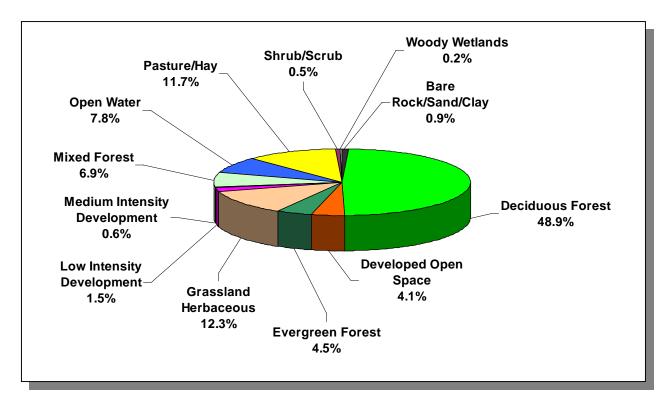


Figure 4-66. Land Use Distribution in Subwatershed 060101040203. More information is provided in Appendix IV.

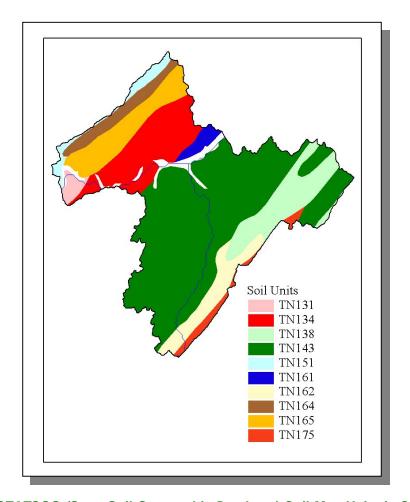


Figure 4-67. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040203.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN131	0.00	С	1.17	4.95	Silty Loam	0.33
TN134	0.00	В	1.38	5.18	Loam	0.31
TN138	0.00	С	2.48	4.26	Sandy Loam	0.22
TN143	0.00	С	1.22	6.44	Loam	0.32
TN151	0.00	С	2.88	4.75	Loam	0.40
TN161	7.00	С	1.41	5.11	Loam	0.31
TN162	1.00	С	1.52	6.20	Loam	0.36
TN164	0.00	С	4.48	5.15	Loam	0.25
TN165	0.00	В	1.79	5.51	Silty Loam	0.32
TN175	0.00	В	1.49	5.23	Loam	0.30

Table 4-53. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040203. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION					IATED PC N WATER	PULATION SHED	
				Portion of				% Change
County	1990	1997	2000	Watershed (%)	1990	1997	2000	(1990-2000)
Greene	55,853	59,369	62,909	0.34	190	202	214	12.6
Hawkins	44,565	48,821	53,563	8.71	3,880	4,250	4,663	20.2
Total	100,418	108,190	116,472		4,070	4,452	4,877	19.8

Table 4-54. Population Estimates in Subwatershed 060101040203.

			NUMBER OF HOUSING UNITS				
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other	
Rogersville	Hawkins	4,149	1,995	1,833	133	29	

Table 4-55. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060101040203.

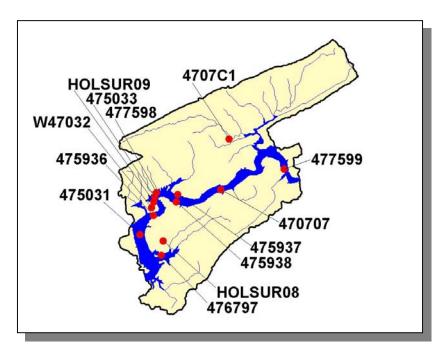


Figure 4-68. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060101040203. More information, including site names and locations, is provided in Appendix IV.

4.2.B.iii.a. Point Source Contributions.

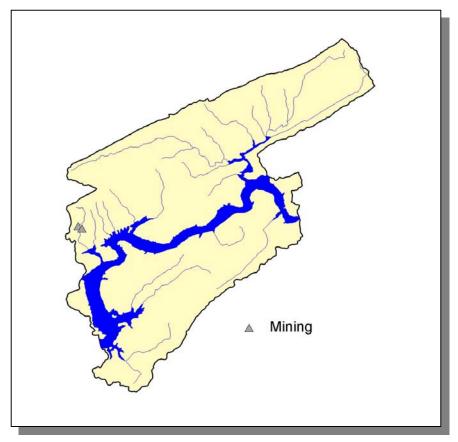


Figure 4-69. Location of Permits Issued in Subwatershed 060101040203. More information, including the names of facilities, is provided in Appendix IV.

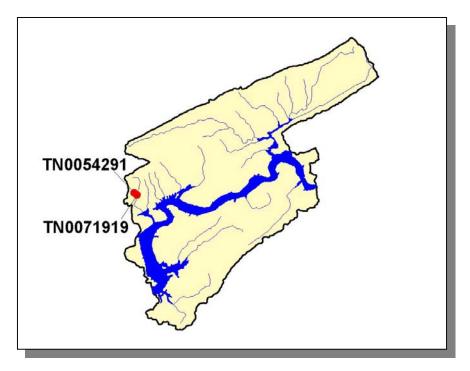


Figure 4-70. Location of Active Mining Sites in Subwatershed 060101040203. More information, including the names of mining operations, is provided in Appendix IV.

4.2.B.iii.b. Nonpoint Source Contributions.

	LIVESTOCK (COUNTS)									
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Chickens (Broilers Sold)	Hogs	Sheep				
2,081	4,034	101	7	1,095	49	27				

Table 4-56. Summary of Livestock Count Estimates in Subwatershed 060101040203.According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

LIVESTOCK COUNTS										
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Chickens (Broilers Sold)	Hogs	Sheep			
Greene	33,962	72,582	7,282	1,190	4,908,815	495	226			
Hawkins	18,796	36,429	903	1,079	0	442	243			

Table 4-57. Summary of Livestock Count Estimates in Greene and Hawkins Counties. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	ITORY	REMOVAL RATE		
	Forest Land Timber Land		Growing Stock	Sawtimber	
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Greene	180.0	171.8	2.0	10.5	
Hawkins	177.4	177.4	0.4	2.1	

Table 4-58. Forest Acreage and Annual Removal Rates (1987-1994) in Greene and Hawkins Counties.

TONS/ACRE/YEAR
0.27
0.54
0.40
0.16
0.53
16.75
16.35
32.10
0.46

Table 4-59. Annual Estimated Total Soil Loss in Subwatershed 060101040203.

4.2.B.iv. 060101040204 (Caney Creek).

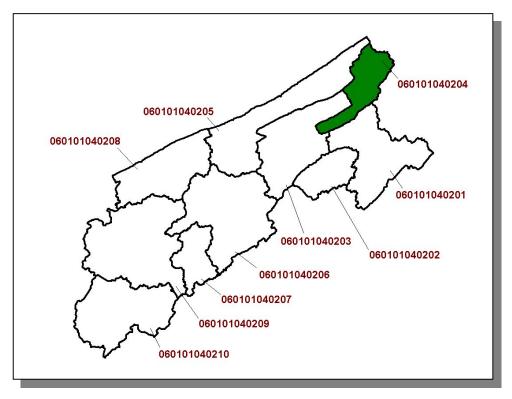


Figure 4-71. Location of Subwatershed 060101040204. All HUC-12 subwatershed boundaries are shown for reference.

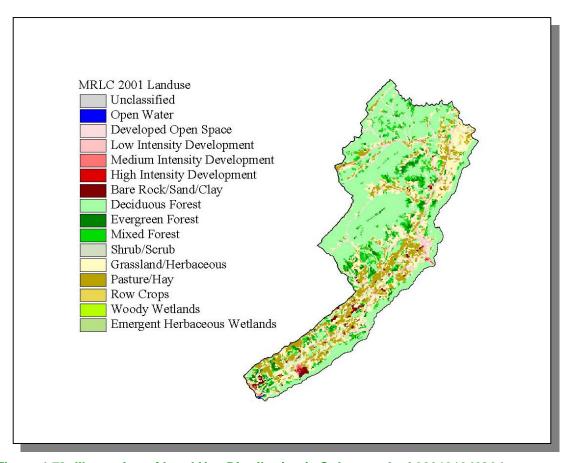


Figure 4-72. Illustration of Land Use Distribution in Subwatershed 060101040204.

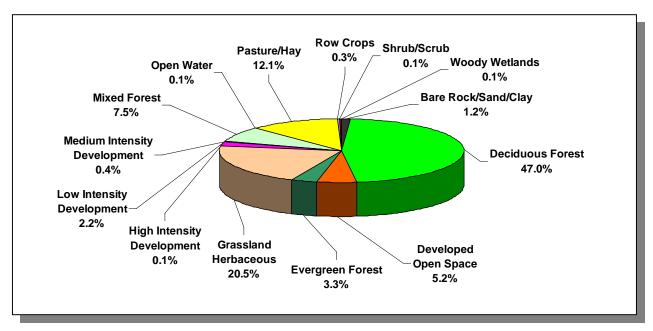


Figure 4-73. Land Use Distribution in Subwatershed 060101040204. More information is provided in Appendix IV.

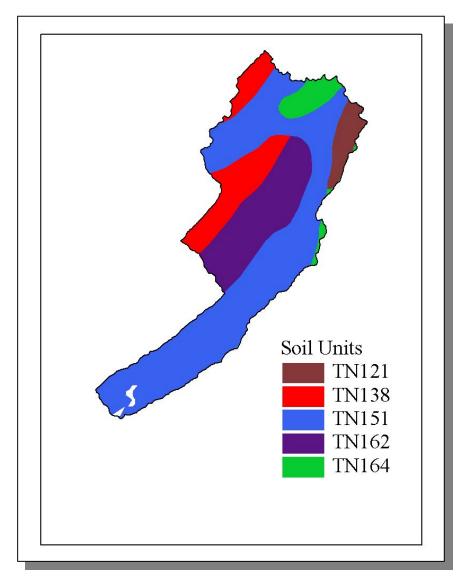


Figure 4-74. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040204.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN121	0.00	В	1.30	5.21	Loam	0.33
TN138	0.00	С	2.48	4.26	Sandy Loam	0.22
TN151	0.00	С	2.88	4.75	Loam	0.40
TN162	1.00	С	1.52	6.20	Loam	0.36
TN164	0.00	С	4.48	5.15	Loam	0.25

Table 4-60. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040204. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION				ESTIM I			
County	1990	1997	2000	Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)
Hawkins	44,565	48.821	53.563	4.53	2.017	2,210	2,425	20.2

Table 4-61. Population Estimates in Subwatershed 060101040204.

			NUMBER OF HOUSING UNITS					
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other		
Rogersville	Hawkins	4,149	1,995	1,833	133	29		

Table 4-62. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060101040204.

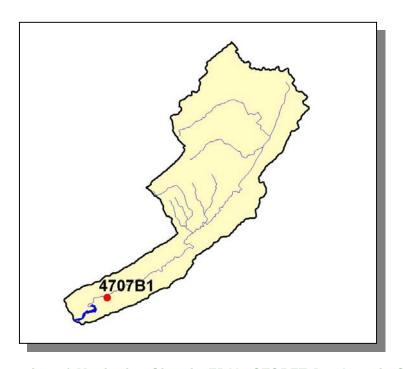


Figure 4-75. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060101040204. More information, including site names and locations, is provided in Appendix IV.

4.2.B.iv.a. Point Source Contributions.

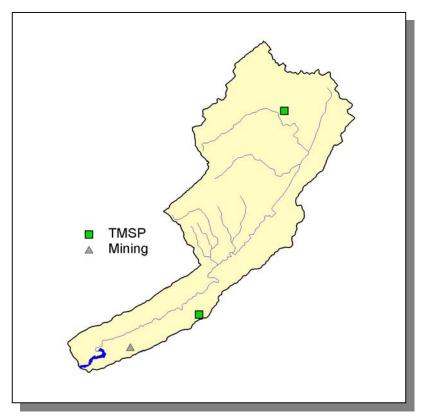


Figure 4-76. Location of Permits Issued in Subwatershed 060101040204. More information, including the names of facilities, is provided in Appendix IV.

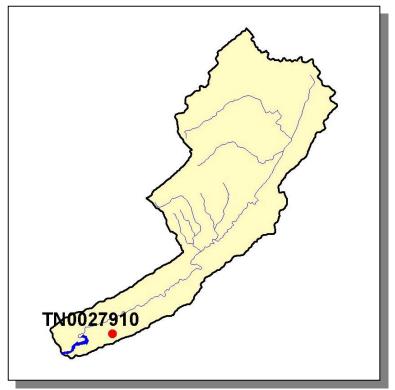


Figure 4-77. Location of Active Mining Sites in Subwatershed 060101040204. More information, including the names of mining operations, is provided in Appendix IV.

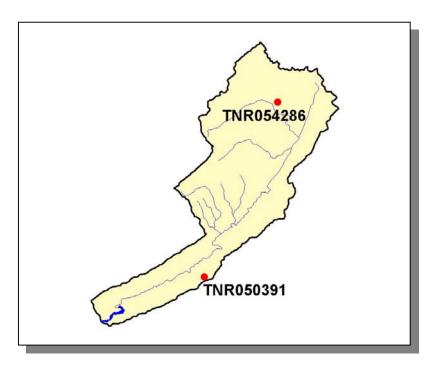


Figure 4-78. Location of TMSP Sites in Subwatershed 060101040204. More information, including the names of facilities, is provided in Appendix IV.

4.2.B.iv.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS									
Beef Cow Cattle Milk Cow Chickens (Layers) Hogs Sheep									
843	1,633	40	< 5	20	11				

Table 4-63. Summary of Livestock Count Estimates in Subwatershed 060101040204. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS										
County Beef Cow Cattle Milk Cow Chickens (Layers) Hogs Shee										
Hawkins	18,796	36,429	903	1,079	442	243				

Table 4-64. Summary of Livestock Count Estimates in Hawkins County. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	INVEN	ITORY	REMOVAL RATE		
	Forest Land Timber Land		Growing Stock	Sawtimber	
County	(thousand acres) (thousand acres)		(million cubic feet)	(million board feet)	
Hawkins	177.4	177.4	0.4	2.1	

Table 4-65. Forest Acreage and Annual Removal Rates (1987-1994) in Hawkins County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.26
Grass (Hayland)	0.56
Legumes, Grass (Hayland)	0.40
Legumes (Hayland)	0.16
Grass, Forbs, Legumes (Mixed Pasture)	0.54
Tobacco (Row Crops)	16.40
Other Vegetable and Truck Crops	33.50
Farmsteads and Ranch Headquarters	0.40

Table 4-66. Annual Estimated Total Soil Loss in Subwatershed 060101040204.

4.2.B.v. 060101040205 (Poor Valley Creek).

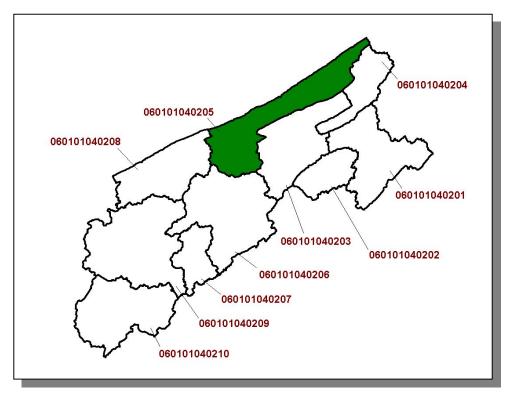


Figure 4-79. Location of Subwatershed 060101040205. All HUC-12 subwatershed boundaries are shown for reference.

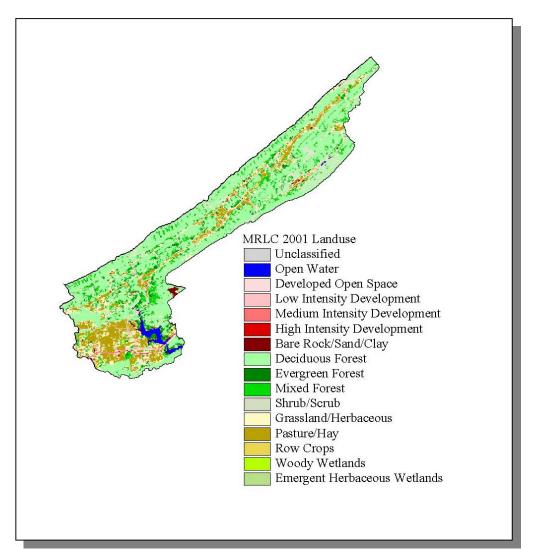


Figure 4-80. Illustration of Land Use Distribution in Subwatershed 060101040205.

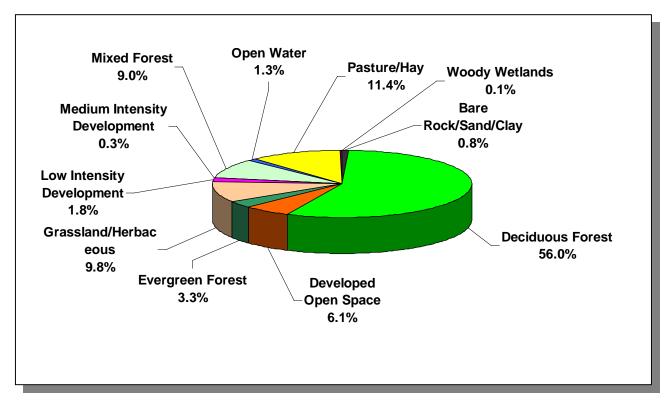


Figure 4-81. Land Use Distribution in Subwatershed 060101040205. More information is provided in Appendix IV.

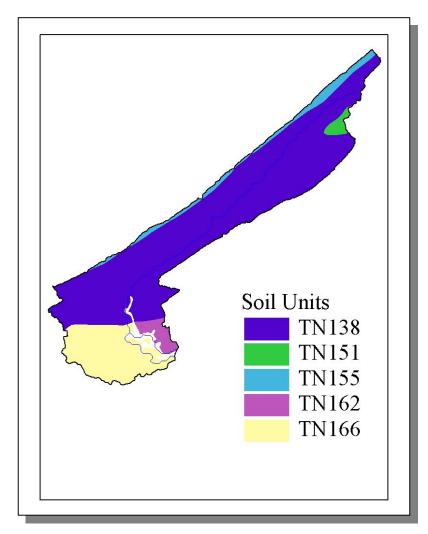


Figure 4-82. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040205.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN138	0.00	С	2.48	4.26	Sandy Loam	0.22
TN151	0.00	С	2.88	4.75	Loam	0.40
TN155	0.00	С	1.71	5.31	Loam	0.32
TN162	1.00	С	1.52	6.20	Loam	0.36
TN166	1.00	С	2.36	5.06	Loam	0.30

Table 4-67. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040205. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION							
				Portion of				% Change
County	1990	1997	2000	Watershed (%)	1990	1997	2000	(1990-2000)
Grainger	17,095	19,456	20,659	0.45	78	88	94	20.5
Hancock	6,739	6,801	6,786	0.09	6	6	6	0.0
Hawkins	44,565	48,821	53,563	10.44	4,653	5,098	5,593	20.2
Total	68,399	75,078	81,008		4,737	5,192	5,693	20.2

Table 4-68. Population Estimates in Subwatershed 060101040205.

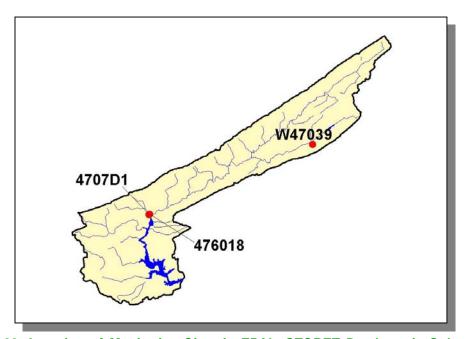


Figure 4-83. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060101040205. More information, including site names and locations, is provided in Appendix IV.

4.2.B.v.a. Point Source Contributions.

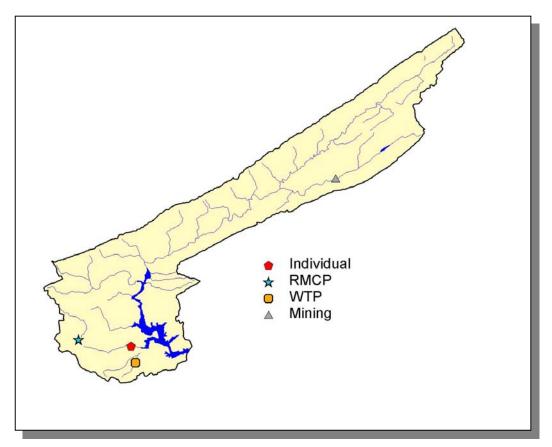


Figure 4-84. Location of Permits Issued in Subwatershed 060101040205. More information, including the names of facilities, is provided in Appendix IV.

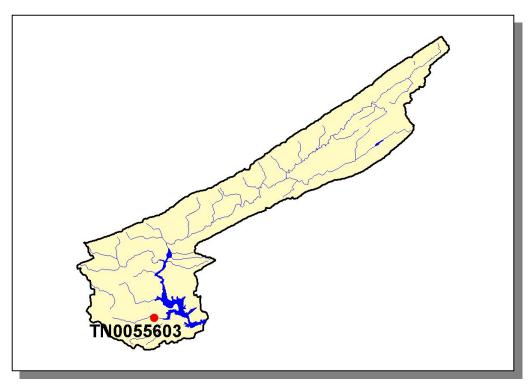


Figure 4-85. Location of Active NPDES Sites in Subwatershed 060101040205. More information, including the names of facilities, is provided in Appendix IV.

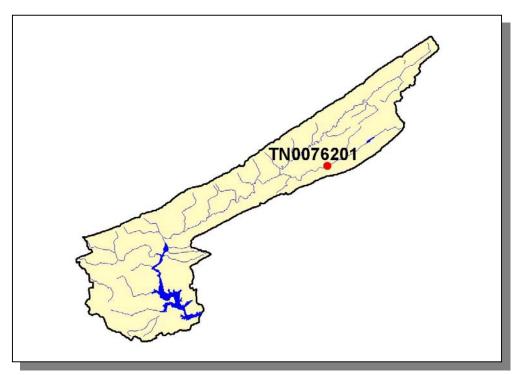


Figure 4-86. Location of Active Mining Sites in Subwatershed 060101040205. More information, including the names of mining operations, is provided in Appendix IV.

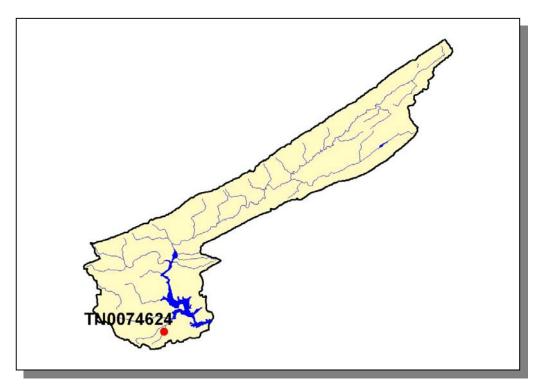


Figure 4-87. Location of Water Treatment Plants in Subwatershed 060101040205. More information, including the names of facilities, is provided in Appendix IV.

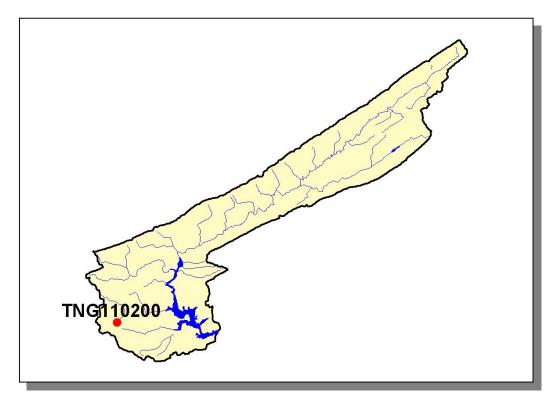


Figure 4-88. Location of Ready Mix Concrete Plants (RMCP) in Subwatershed 060101040205. More information is provided in Appendix IV.

4.2.B.v.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS									
Beef Cow Cattle Milk Cow Chickens (Layers) Hogs Sheep									
1,367	2,652	68	< 5	34	18				

Table 4-69. Summary of Livestock Count Estimates in Subwatershed 060101040205. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	LIVESTOCK COUNTS										
County Beef Cow Cattle Milk Cow Chickens (Layers) Hogs She											
Grainger	12,115	23,927	942	1,184	510	195					
Hancock	7,079	14,311	89	364	0	67					
Hawkins	18,796	36,429	903	1,079	442	243					

Table 4-70. Summary of Livestock Count Estimates in Grainger, Hancock, and Hawkins Counties. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	INVEN	NTORY	REMOVAL RATE		
	Forest Land Timber Land		Growing Stock	Sawtimber	
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Grainger	102.6	102.6	0.3	1.8	
Hancock	92.9	92.9	2.7	14.2	
Hawkins	177.4	177.4	0.4	2.1	

Table 4-71. Forest Acreage and Annual Removal Rates (1987-1994) in Grainger, Hancock, and Hawkins Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.29
Grass (Hayland)	0.55
Legumes, Grass (Hayland)	0.41
Legumes (Hayland)	0.16
Grass, Forbs, Legumes (Mixed Pasture)	0.55
Corn (Row Crops)	5.29
Tobacco (Row Crops)	16.18
Other Vegetable and Truck Crops	33.50
Farmsteads and Ranch Headquarters	0.41

Table 4-72. Annual Estimated Total Soil Loss in Subwatershed 060101040205.

4.2.B.vi. 060101040206 (Cherokee Lake).

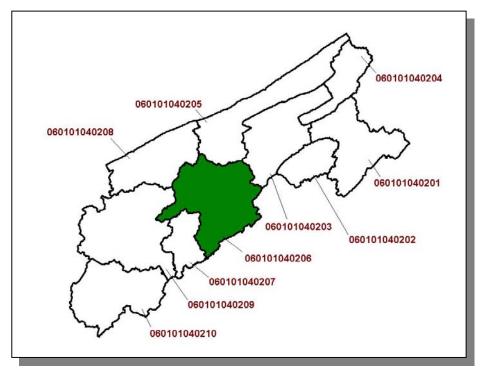


Figure 4-89. Location of Subwatershed 060101040206. All HUC-12 subwatershed boundaries are shown for reference.

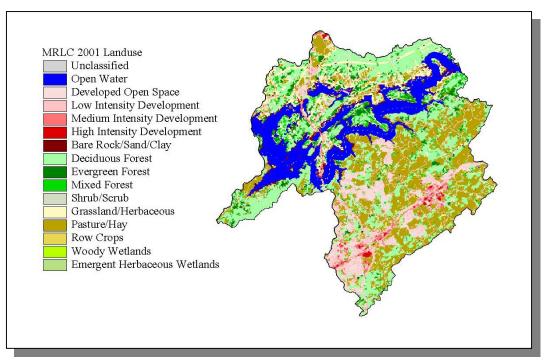


Figure 4-90. Illustration of Land Use Distribution in Subwatershed 060101040206.

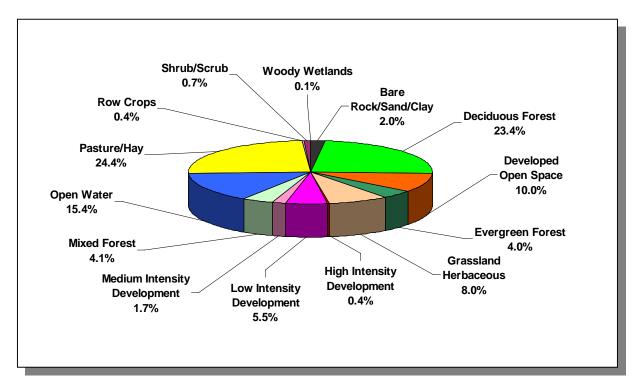


Figure 4-91. Land Use Distribution in Subwatershed 060101040206. More information is provided in Appendix IV.

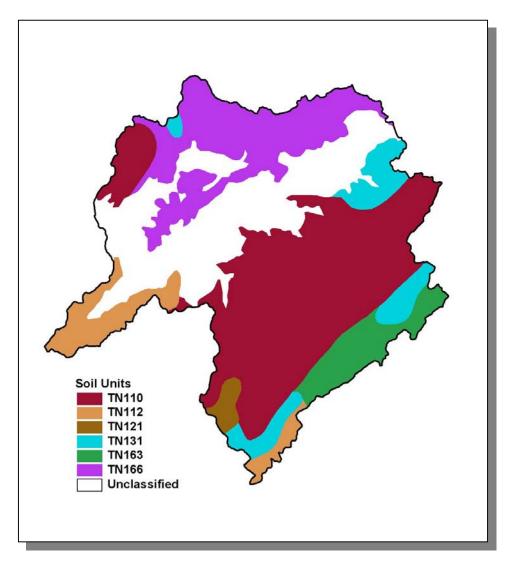


Figure 4-92. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040206.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN110	0.00	В	2.22	4.96	Loam	0.31
TN112	6.00	С	2.36	5.09	Loam	0.35
TN121	0.00	В	1.30	5.21	Loam	0.33
TN131	0.00	С	1.17	4.95	Silty Loam	0.33
TN163	0.00	В	1.37	5.15	Loam	0.31
TN166	1.00	С	2.36	5.06	Loam	0.30

Table 4-73. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040206. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED				
County	1990	1997	2000	Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)
Grainger	17,095	19,456	20,659	4.08	698	794	844	20.9
Hamblen	50,480	53,699	58,128	21.88	11,045	11,749	12,718	15.1
Hawkins	44,565	48,821	53,563	2.05	913	1,000	1,097	20.2
Total	112,140	121,976	132,350		12,656	13,543	14,659	15.8

Table 4-74. Population Estimates in Subwatershed 060101040206.

				NUMBER OF HO	DUSING UNITS	
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Morristown	Hamblen	21,385	9,248	8,768	466	14

Table 4-75. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060101040206.

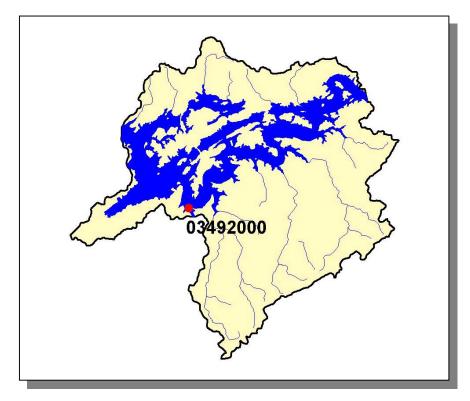


Figure 4-93. Location of Historical Streamflow Data Collection Sites in Subwatershed 060101040206. More information is provided in Appendix IV.

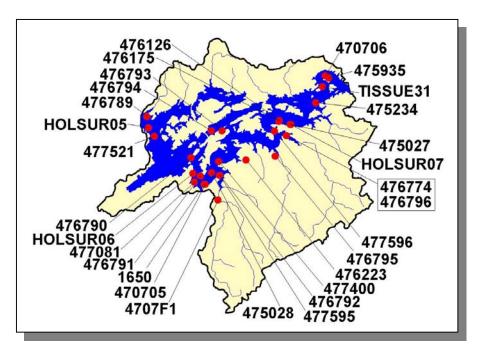


Figure 4-94. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060101040206. More information, including site names and locations, is provided in Appendix IV.

4.2.B.vi.a. Point Source Contributions.

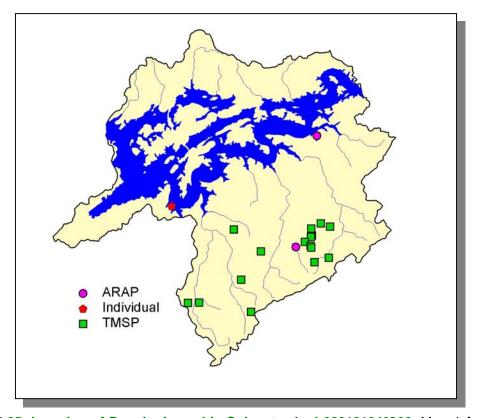


Figure 4-95. Location of Permits Issued in Subwatershed 060101040206. More information, including the names of facilities, is provided in Appendix IV.

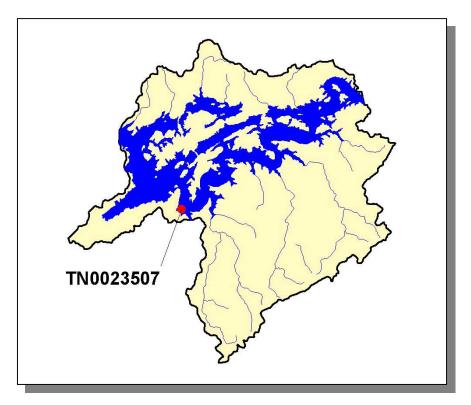


Figure 4-96. Location of Active NPDES Sites in Subwatershed 060101040206. More information, including the names of facilities, is provided in Appendix IV.

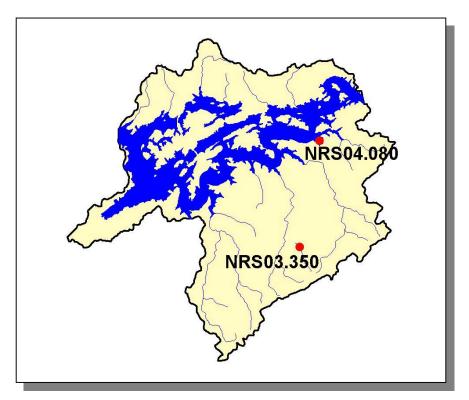


Figure 4-97. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 060101040206. More information is provided in Appendix IV.

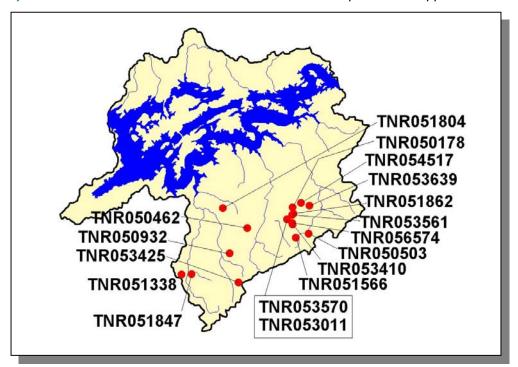


Figure 4-98. Location of TMSP Sites in Subwatershed 060101040206. More information, including the names of facilities, is provided in Appendix IV.

4.2.B.vi.b. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)								
Beef Cow	Chickens (Broilers Sold)	Hogs	Sheep					
2,124	4,065	243	4	331,502	240	76		

Table 4-76. Summary of Livestock Count Estimates in Subwatershed 060101040206. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	LIVESTOCK COUNTS												
County	County Beef Cow Cattle Milk Cow Chickens (Layers) Chickens (Broilers Sold)						Sheep						
Grainger	12,115	23,927	942	1,184	0	510	195						
Hamblen	8,620	16,376	1,129	233	1,776,000	1,195	367						
Hawkins	18,796	36,429	903	1,079	0	442	243						

Table 4-77. Summary of Livestock Count Estimates in Grainger, Hamblen, and Hawkins Counties. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	NTORY	REMOVAL RATE		
	Forest Land Timber Land		Growing Stock	Sawtimber	
County	County (thousand acres) (thousand		(million cubic feet)	(million board feet)	
Grainger	102.6	102.6	0.3	1.8	
Hamblen	32.8	32.8	0.0	0.0	
Hawkins	177.4	177.4	0.4	2.1	

Table 4-78. Forest Acreage and Annual Removal Rates (1987-1994) in Grainger, Hamblen, and Hawkins Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.61
Grass (Hayland)	0.39
Legumes, Grass (Hayland)	0.28
Legumes (Hayland)	0.16
Grass, Forbs, Legumes (Mixed Pasture)	0.45
Corn (Row Crops)	12.64
Tobacco (Row Crops)	9.51
Other Vegetable and Truck Crops	33.50
Aquaculture in a Crop Rotation	0.15
Other Land in Farms	0.21
Farmsteads and Ranch Headquarters	0.26

Table 4-79. Annual Estimated Total Soil Loss in Subwatershed 060101040206.

4.2.B.vii. 060101040207 Turkey Creek).

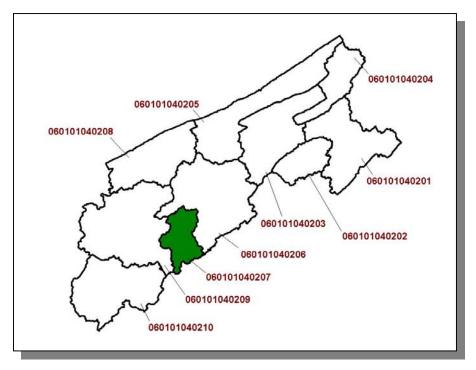


Figure 4-99. Location of Subwatershed 060101040207. All HUC-12 subwatershed boundaries are shown for reference.

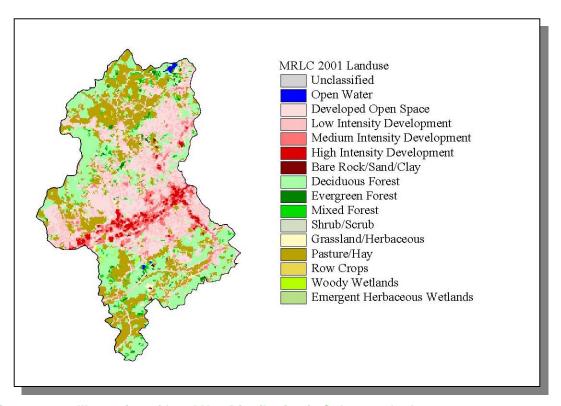


Figure 4-100. Illustration of Land Use Distribution in Subwatershed 060101040207.

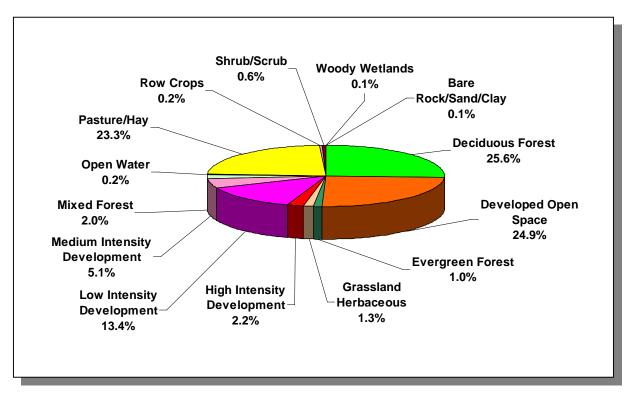


Figure 4-101. Land Use Distribution in Subwatershed 060101040207. More information is provided in Appendix IV.

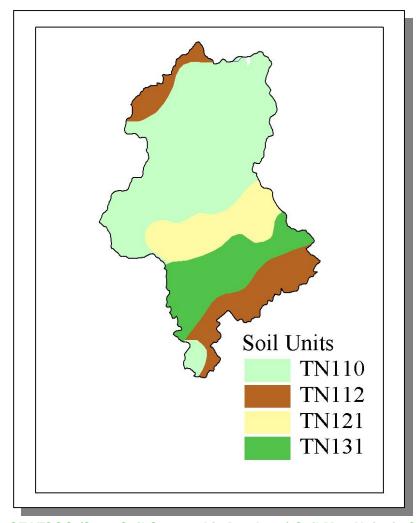


Figure 4-102. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040207.

STATSGO	PERCENT	HYDROLOGIC	PERMEABILITY	SOIL	ESTIMATED	SOIL
MAP UNIT ID	HYDRIC	GROUP	(in/hour)	pН	SOIL TEXTURE	ERODIBILITY
TN110	0.00	В	2.22	4.96	Loam	0.31
TN112	6.00	С	2.36	5.09	Loam	0.35
TN121	0.00	В	1.30	5.21	Loam	0.33
TN131	0.00	С	1.17	4.95	Silty Loam	0.33

Table 4-80. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040207. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION					IATED PO N WATER	PULATION SHED	
				Portion of				% Change
County	1990	1997	2000	Watershed (%)	1990	1997	2000	(1990-2000)
Hamblen	50,480	53,699	58,128	10.49	5,295	5,633	6,098	15.2

Table 4-81. Population Estimates in Subwatershed 060101040207.

			NUMBER OF HOUSING UNITS				
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other	
Morristown	Hamblen	21,385	9,248	8,768	466	14	

Table 4-82. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060101040207.

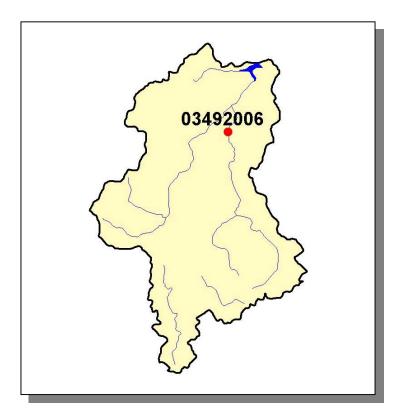


Figure 4-103. Location of Historical Streamflow Data Collection Sites in Subwatershed 060101040207. More information is provided in Appendix IV.

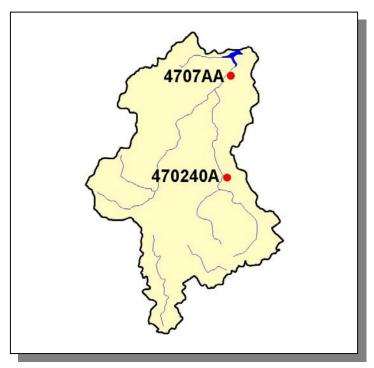


Figure 4-104. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060101040207. More information, including site names and locations, is provided in Appendix IV.

4.2.B.vii.a. Point Source Contributions.

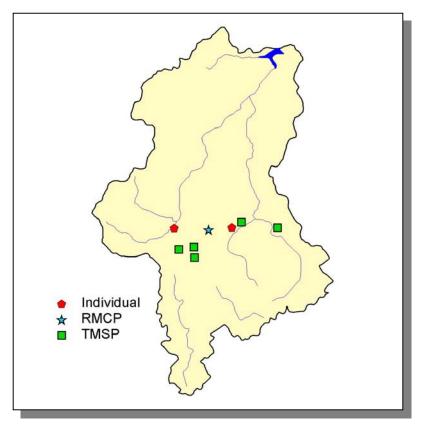


Figure 4-105. Location of Permits Issued in Subwatershed 060101040207. More information, including the names of facilities, is provided in Appendix IV.



Figure 4-106. Location of Active NPDES Sites in Subwatershed 060101040207. More information, including the names of facilities, is provided in Appendix IV.



Figure 4-107. Location of Ready Mix Concrete Plants (RMCP) in Subwatershed 060101040207. More information is provided in Appendix IV.

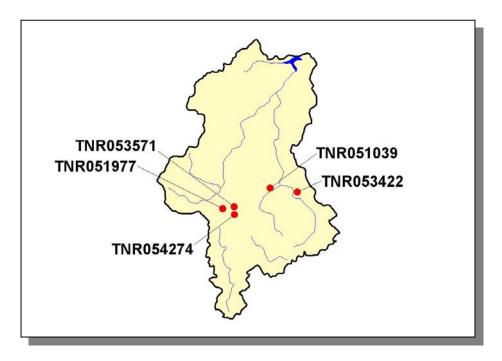


Figure 4-108. Location of TMSP Sites in Subwatershed 060101040207. More information, including the names of facilities, is provided in Appendix IV.

4.2.B.vii.a.i. Dischargers to Water Bodies Listed on the 2004 303(d) List

There is one NPDES facility discharging to water bodies listed on the 2004 303(d) list in Subwatershed 060101040207:

TN0067989 (Koch Foods, LLC) discharges to West Fork Turkey Creek
 @ RM 0.1



Figure 4-109. Location of NPDES Dischargers to Water Bodies Listed on the 2004 303(d) List in Subwatershed 060101040207. More information, including the names of facilities, is provided in Appendix IV.

PERMIT #	1Q10	3Q10	7Q10	3Q20	QDESIGN
TN0067989					

Table 4-83. Receiving Stream Flow Information for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 060101040207. Data are in million gallons per day (MGD). Data were obtained from the USGS publication <u>Flow Duration and Low Flows of</u>
Tennessee Streams Through 1992 or from permit files.

PERMIT #	FLOW
TN0067989	X

Table 4-84. Monitoring Requirements for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 060101040207.

PERMIT#	CBOD ₅	NH ₃	NO ₃	TSS	OIL AND GREASE	DO	рН
TN0067989	Х	X	X	Х	Х	Х	·X

Table 4-85. Parameters Monitored for Daily Maximum Limits for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 060101040207. WET, Whole Effluent Toxicity; CBOD₅, Carbonaceous Biochemical Oxygen Demand (5-Day); TRC, Total Residual Chlorine; TSS, Total Suspended Solids.

4.2.B.vii.b. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)								
Beef Cow Cattle Milk Cow Chickens (Layers) Chickens (Broile					Hogs	Sheep		
603	1,146	79	< 5	124,299	84	26		

Table 4-86. Summary of Livestock Count Estimates in Subwatershed 060101040207. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

LIVESTOCK COUNTS							
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Chickens (Broilers Sold)	Hogs	Sheep
Hamblen	8,620	16,376	1,129	233	1,776,000	1,195	367

Table 4-87. Summary of Livestock Count Estimates in Hamblen County. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	ITORY	REMOVAL RATE		
County	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)	
Hamblen	32.8	32.8	0.0	0.0	

Table 4-88. Forest Acreage and Annual Removal Rates (1987-1994) in Hamblen County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.57
Grass (Hayland)	0.36
Legumes, Grass (Hayland)	0.15
Grass, Forbs, Legumes (Mixed Pasture)	0.30
Corn (Row Crops)	14.92
Tobacco (Row Crops)	8.43
Aquaculture in a Crop Rotation	0.15
Other Land in Farms	0.21
Farmsteads and Ranch Headquarters	0.13

Table 4-89. Annual Estimated Total Soil Loss in Subwatershed 060101040207.

4.2.B.viii. 060101040208 (German Creek).

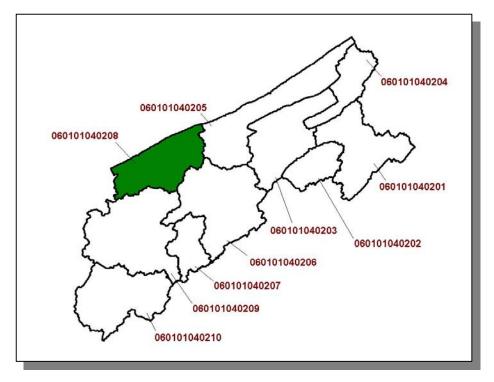


Figure 4-110. Location of Subwatershed 060101040208. All HUC-12 subwatershed boundaries are shown for reference.

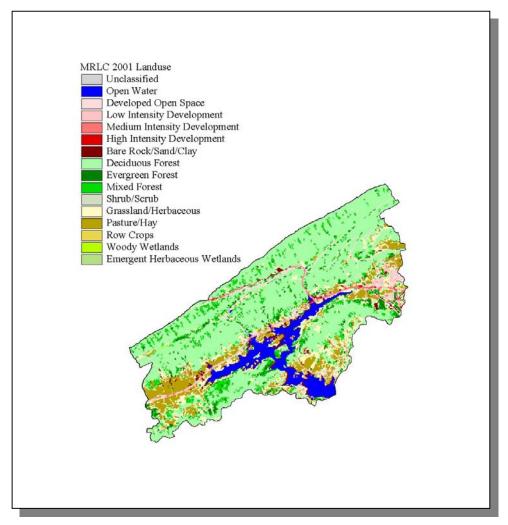


Figure 4-111. Illustration of Land Use Distribution in Subwatershed 060101040208.

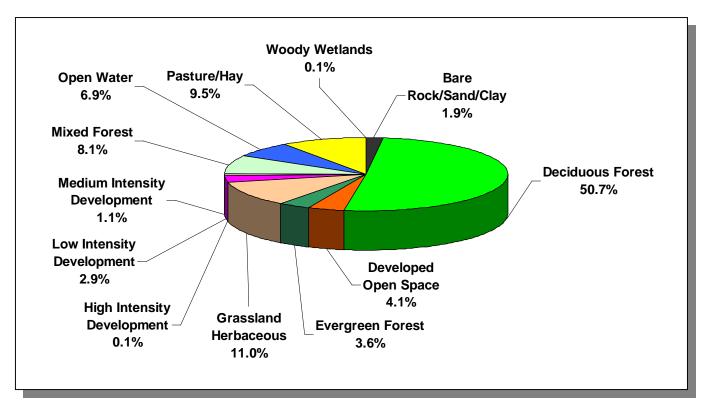


Figure 4-112. Land Use Distribution in Subwatershed 060101040208. More information is provided in Appendix IV.

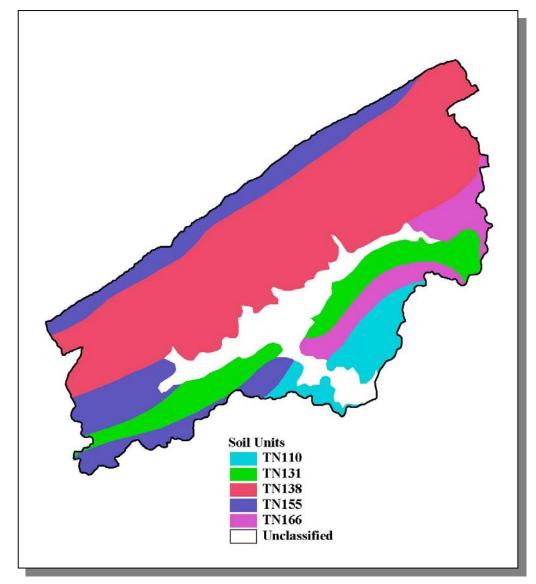


Figure 4-113. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040208.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN110	0.00	В	2.22	4.96	Loam	0.31
TN131	0.00	С	1.17	4.95	Silty Loam	0.33
TN138	0.00	С	2.48	4.26	Sandy Loam	0.22
TN155	0.00	С	1.71	5.31	Loam	0.32
TN166	1.00	С	2.36	5.06	Loam	0.30

Table 4-90. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040208. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION							
				Portion of				% Change
County	1990	1997	2000	Watershed (%)	1990	1997	2000	(1990-2000)
Grainger	17,095	19,456	20,659	12.92	2,208	2,513	2,668	20.8
Hancock	6,739	6,801	6,786	0.13	9	9	9	0.0
Hawkins	44,565	48,821	53,563	0.01	5	5	6	20.0
Total	68,399	75,078	81,008		2,222	2,527	2,683	20.7

Table 4-91. Population Estimates in Subwatershed 060101040208.

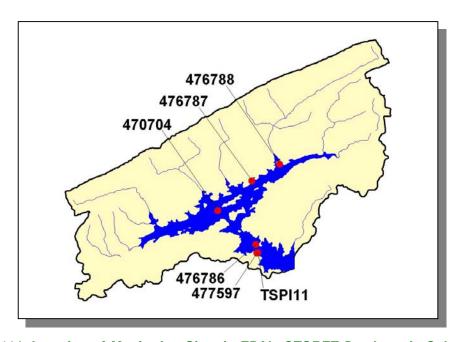


Figure 4-114. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060101040208. More information, including site names and locations, is provided in Appendix IV.

4.2.B.viii.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.B.viii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS								
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep			
869	1,715	68	< 5	37	14			

Table 4-92. Summary of Livestock Count Estimates in Subwatershed 060101040208. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older

LIVESTOCK COUNTS									
County Beef Cow Cattle Milk Cow Chickens (Layers) Hogs Sheep									
Grainger	12,115	23,927	942	1,184	510	195			
Hancock	7,079	14,311	89	364	0	67			
Hawkins	18,796	36,429	903	1,079	442	243			

Table 4-93. Summary of Livestock Count Estimates in Grainger, Hancock, and Hawkins Counties. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	INVEN	NTORY	REMOVAL RATE		
County	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)	
Grainger	102.6	102.6	0.3	1.8	
Hancock	92.9	92.9	2.7	14.2	
Hawkins	177.4	177.4	0.4	2.1	

Table 4-94. Forest Acreage and Annual Removal Rates (1987-1994) in Grainger, Hancock, and Hawkins Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.01
Grass (Hayland)	0.32
Legumes, Grass (Hayland)	0.60
Legumes (Hayland)	0.16
Grass, Forbs, Legumes (Mixed Pasture)	0.84
Corn (Row Crops)	5.67
Tobacco (Row Crops)	7.34
Other Vegetable and Truck Crops	33.50
Farmsteads and Ranch Headquarters	0.52

Table 4-95. Annual Estimated Total Soil Loss in Subwatershed 060101040208.

4.2.B.ix. 060101040209 (Cherokee Lake).

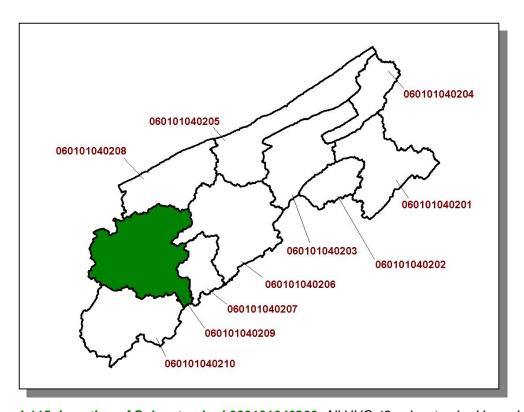


Figure 4-115. Location of Subwatershed 060101040209. All HUC-12 subwatershed boundaries are shown for reference.

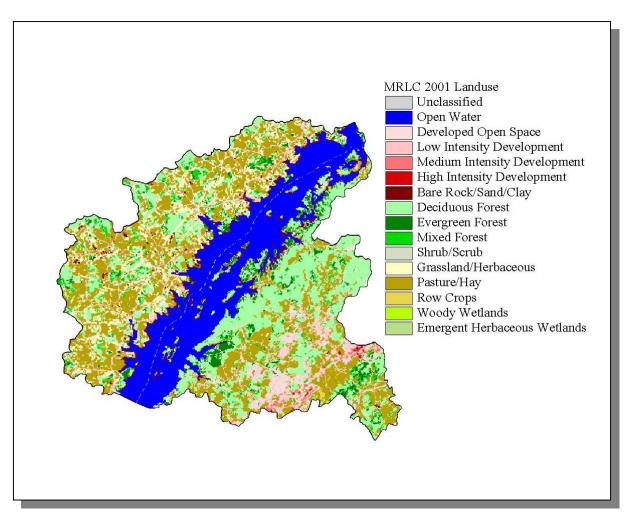


Figure 4-116. Illustration of Land Use Distribution in Subwatershed 060101040209.

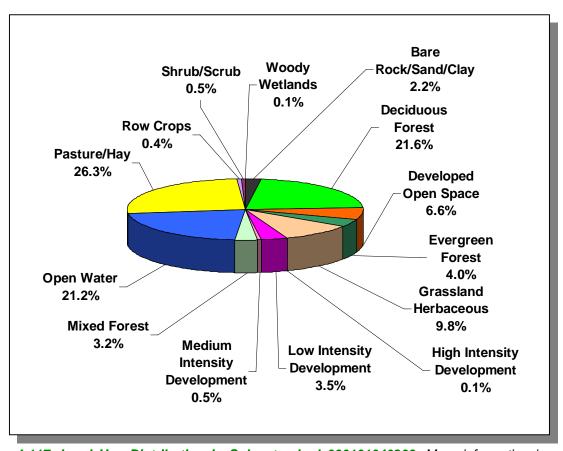


Figure 4-117. Land Use Distribution in Subwatershed 060101040209. More information is provided in Appendix IV.

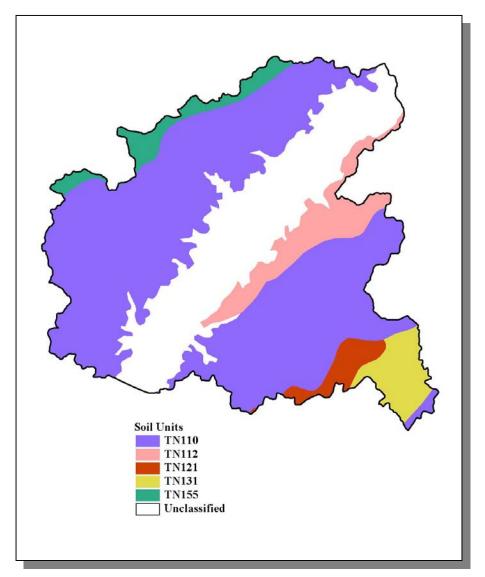


Figure 4-118. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040209.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN110	0.00	В	2.22	4.96	Loam	0.31
TN112	6.00	С	2.36	5.09	Loam	0.35
TN121	0.00	В	1.30	5.21	Loam	0.33
TN131	0.00	C	1.17	4.95	Silty Loam	0.33
TN155	0.00	С	1.71	5.31	Loam	0.32

Table 4-96. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040209. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION				IATED PO N WATER	PULATION SHED		
				Portion of				% Change
County	1990	1997	2000	Watershed (%)	1990	1997	2000	(1990-2000)
Grainger	17,095	19,456	20,659	10.68	1,827	2,079	2,207	20.8
Hamblen	50,480	53,699	58,128	19.95	10,069	10,711	11,595	15.2
Total	67,575	73,155	78,787		11,896	12,790	13,802	16.0

Table 4-97. Population Estimates in Subwatershed 060101040209.

				NUMBER OF HO	DUSING UNITS	
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Morristown	Hamblen	21,385	9,248	8,768	466	14

Table 4-98. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060101040209.

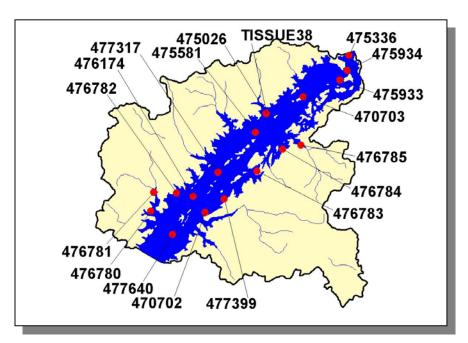


Figure 4-119. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060101040209. More information, including site names and locations, is provided in Appendix IV.

4.2.B.ix.a. Point Source Contributions.

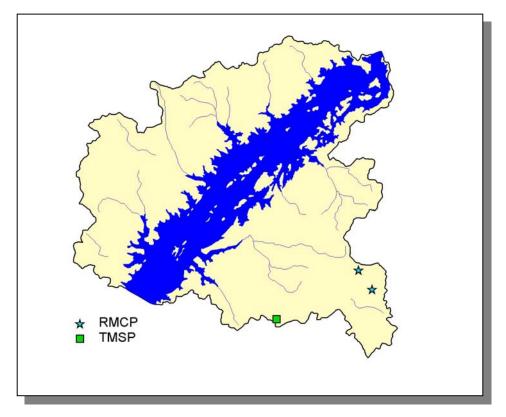


Figure 4-120. Location of Permits Issued in Subwatershed 060101040209. More information, including the names of facilities, is provided in Appendix IV.

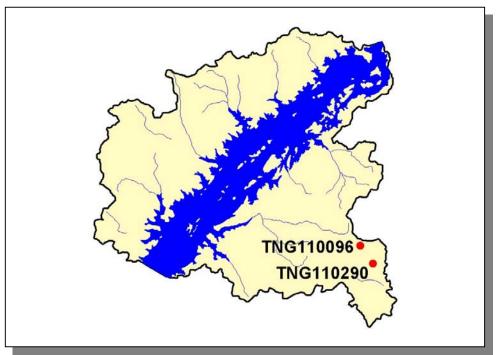


Figure 4-121. Location of Ready Mix Concrete Plants (RMCP) in Subwatershed 060101040209. More information is provided in Appendix IV.

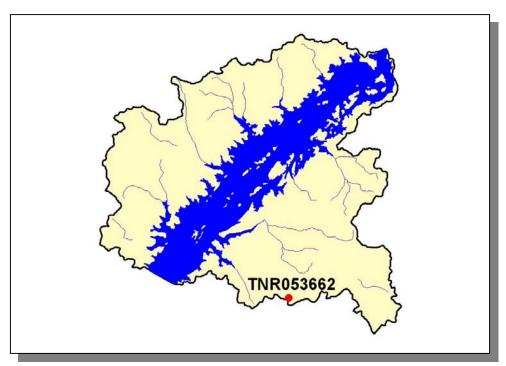


Figure 4-122. Location of TMSP Sites in Subwatershed 060101040209. More information, including the names of facilities, is provided in Appendix IV.

4.2.B.ix.b. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)									
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Chickens (Broilers Sold)	Hogs	Sheep			
2,984	5,822	283	7	196,249	218	73			

Table 4-99. Summary of Livestock Count Estimates in Subwatershed 060101040209. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	LIVESTOCK COUNTS							
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Chickens (Broilers Sold)	Hogs	Sheep	
Grainger	12,115	23,927	942	1,184	0	510	195	
Hamblen	8,620	16,376	1,129	233	1,776,000	1,195	367	

Table 4-100. Summary of Livestock Count Estimates in Grainger and Hamblen Counties.According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	ITORY	REMOVAL RATE		
	Forest Land	Timber Land	Growing Stock	Sawtimber	
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Grainger	102.6	102.6	0.3	1.8	
Hamblen	32.8	32.8	0.0	0.0	

Table 4-101. Forest Acreage and Annual Removal Rates (1987-1994) in Grainger and Hamblen Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.78
Grass (Hayland)	0.34
Legumes, Grass (Hayland)	0.37
Grass, Forbs, Legumes (Mixed Pasture)	0.56
Corn (Row Crops)	10.44
Tobacco (Row Crops)	7.84
Aquaculture in Crop Rotation	0.15
Other Land in Farms	0.21
Farmsteads and Ranch Headquarters	0.32

Table 4-102. Annual Estimated Total Soil Loss in Subwatershed 060101040209.

4.2.B.x. 060101040210 (Cherokee Lake).

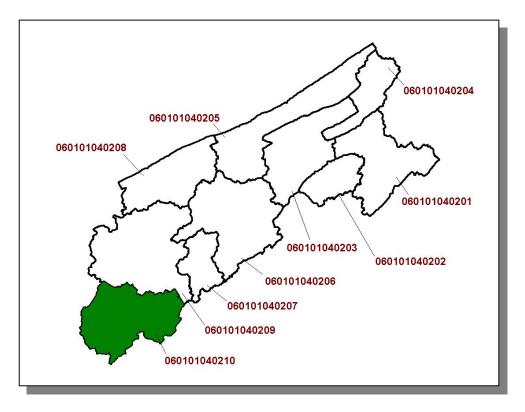


Figure 4-123. Location of Subwatershed 060101040210. All HUC-12 subwatershed boundaries are shown for reference.

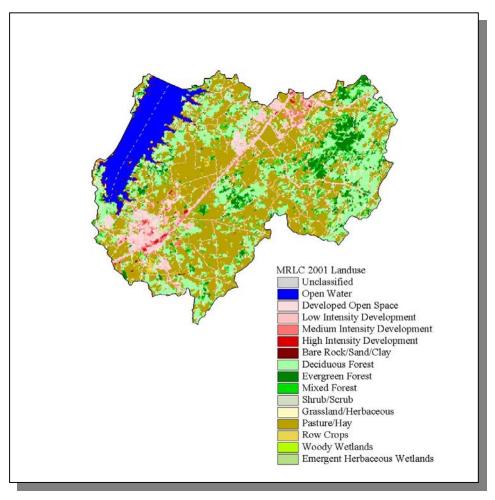


Figure 4-124. Illustration of Land Use Distribution in Subwatershed 060101040210.

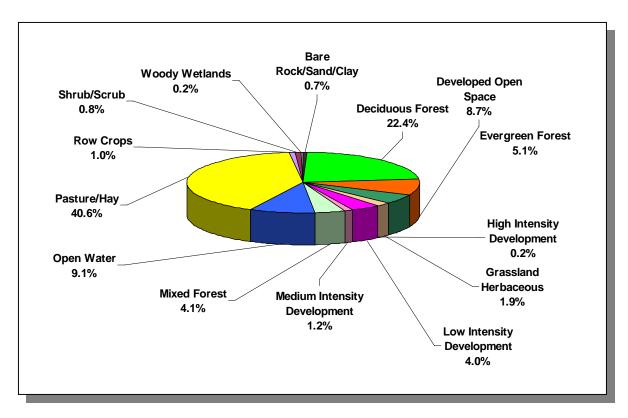


Figure 4-125. Land Use Distribution in Subwatershed 060101040210. More information is provided in Appendix IV.

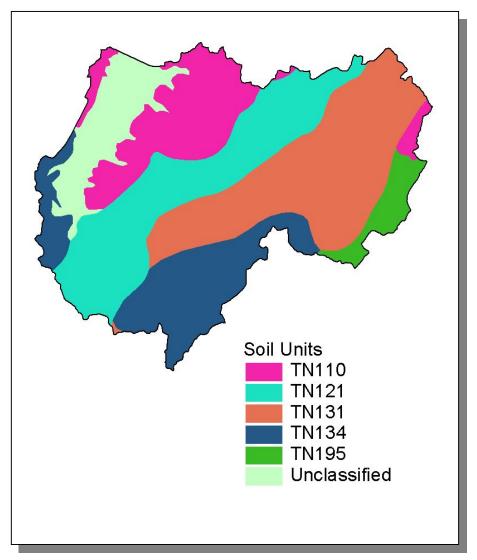


Figure 4-126. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040210.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN110	0.00	В	2.22	4.96	Loam	0.31
TN121	0.00	В	1.30	5.21	Loam	0.33
TN131	0.00	С	1.17	4.95	Silty Loam	0.33
TN134	0.00	В	1.38	5.18	Loam	0.31
TN195	0.00	С	1.93	5.19	Silty Loam	0.34

Table 4-103. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040210. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED				
				Portion of				% Change
County	1990	1997	2000	Watershed (%)	1990	1997	2000	(1990-2000)
Grainger	17,095	19,456	20,659	0.83	142	161	171	20.4
Hamblen	50,480	53,699	58,128	5.89	2,976	3,166	3,427	15.2
Jefferson	33,016	42,168	44,294	11.45	3,781	4,829	5,073	34.2
Total	100,591	115,323	123,081		6,899	8,156	8,671	25.7

Table 4-104. Population Estimates in Subwatershed 060101040210.

				NUMBER OF HO	USING UNITS	
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Jefferson City	Jefferson	5,494	2,006	1,922	84	0
Morristown	Hamblen	21,385	9,248	8,768	466	14
Total		26,879	11,254	10,690	550	14

Table 4-105. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060101040210.

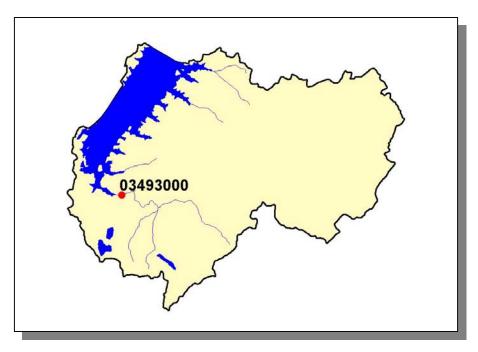


Figure 4-127. Location of Historical Streamflow Data Collection Sites in Subwatershed 060101040210. More information is provided in Appendix IV.

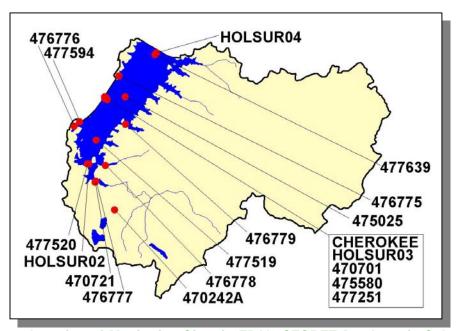


Figure 4-128. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060101040210. More information, including site names and locations, is provided in Appendix IV.

4.2.B.x.a. Point Source Contributions.

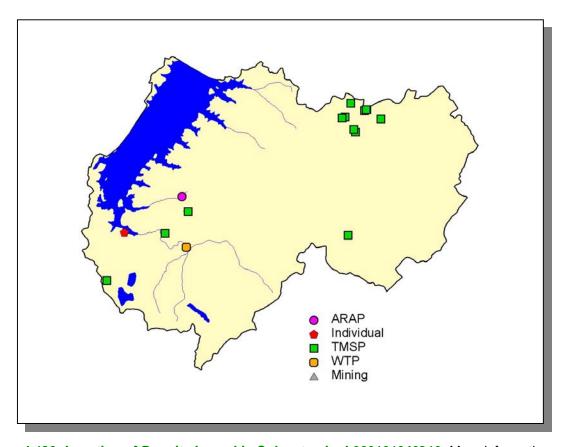


Figure 4-129. Location of Permits Issued in Subwatershed 060101040210. More information, including the names of facilities, is provided in Appendix IV.

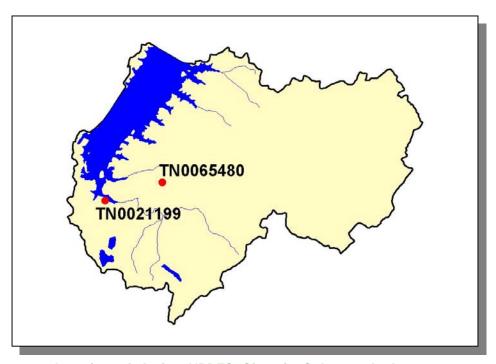


Figure 4-130. Location of Active NPDES Sites in Subwatershed 060101040210. More information, including the names of facilities, is provided in Appendix IV.

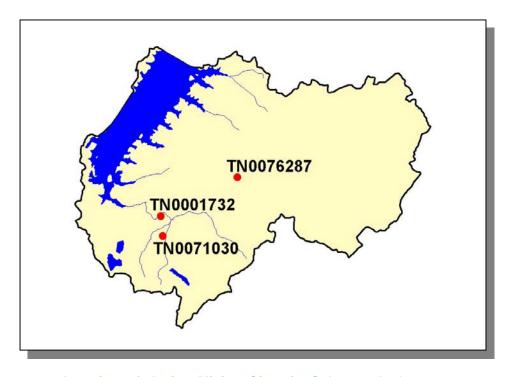


Figure 4-131. Location of Active Mining Sites in Subwatershed 060101040210. More information, including the names of mining operations, is provided in Appendix IV.

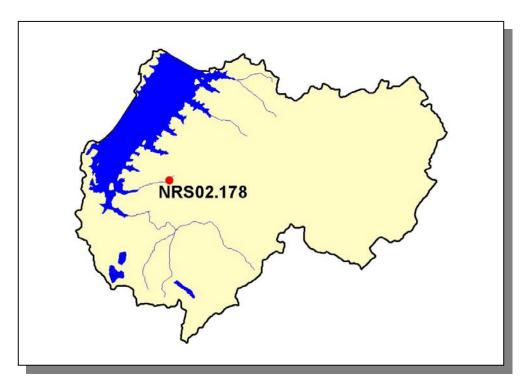


Figure 4-132. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 060101040210. More information is provided in Appendix IV.

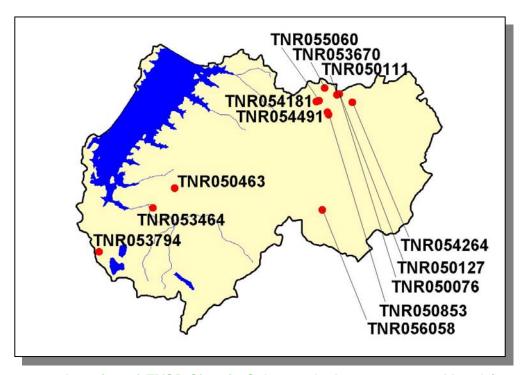


Figure 4-133. Location of TMSP Sites in Subwatershed 060101040210. More information, including the names of facilities, is provided in Appendix IV.

4.2.B.x.b. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)						
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Chickens (Broilers Sold)	Hogs	Sheep
2,636	5,674	314	<5	350,975	95	96

Table 4-106. Summary of Livestock Count Estimates in Subwatershed 060101040210. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

LIVESTOCK COUNTS								
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Chickens (Broilers Sold)	Hogs	Sheep	
Grainger	12,115	23,927	942	1,184	0	510	195	
Hamblen	8,620	16,376	1,129	233	1,776,000	1,195	367	
Jefferson	16,126	35,718	1,878	1,633	1,880,000	183	567	

Table 4-107. Summary of Livestock Count Estimates in Grainger, Hamblen, and Jefferson Counties. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	NTORY	REMOVAL RATE		
	Forest Land	Timber Land	Growing Stock	Sawtimber	
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Grainger	102.6	102.6	0.3	1.8	
Hamblen	32.8	32.8	0	0	
Jefferson	62.2	62.2	0.6	1.8	

Table 4-108. Forest Acreage and Annual Removal Rates (1987-1994) in Grainger, Hamblen, and Jefferson Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.58
Grass (Hayland)	0.27
Legumes, Grass (Hayland)	0.34
Grass, Forbs, Legumes (Mixed Pasture)	0.42
Corn (Row Crops)	20.26
Tobacco (Row Crops)	4.35
Oats (Close-Grown Cropland)	13.51
Aquaculture in a Crop Rotation	0.15
Other Land in Farms	0.21
Farmsteads and Ranch Headquarters	0.05

Table 4-109. Annual Estimated Total Soil Loss in Subwatershed 060101040210.